## LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently Amended) [[A]] An isolated type II restriction endonuclease recognizing only a particular nucleotide sequence of DNA and which cleaves the DNA, wherein the enzyme comprising comprises the amino acid sequence of SEQ ID [[No:]] NO: 3, and wherein the type II restriction endonuclease recognizing and cutting recognizes and cuts DNA only at [[a]] the particular sequence of nucleotides.
- 2. (Currently Amended) The <u>isolated</u> type II restriction endonuclease according to claim 1, wherein the DNA is from <u>a</u> bioorganism.
- 3. (Currently Amended) The <u>isolated</u> type II restriction endonuclease according to claim 1, wherein the DNA is manually synthesized.
- 4. (Currently Amended) The <u>isolated</u> type II restriction endonuclease according to claim 1, wherein the particular <u>nucleotide</u> sequence <del>comprising</del> <u>comprises</u> the sequence 5'-CCATC-3' as shown by <u>SEQ-ID-NO:1</u> <u>SEQ ID NO:1</u>.
- 5. (Currently Amended) The <u>isolated</u> type II restriction endonuclease according to claim 4, wherein the type II restriction endonuclease cleaves the DNA <del>downstream of said DNA sequence of nucleotides at the fourth base in the upper strand and the fifth base in the lower strand four and five bases downstream from the particular nucleotide sequence in the top and bottom strands, respectively, of <del>SEQ ID NO: 1</del> <u>SEQ ID NO: 1</u>.</del>
- 6. (Currently Amended) The <u>isolated</u> type II restriction endonuclease according to claim 1, wherein the type II restriction endonuclease is an enzyme derived from <u>a</u> microorganism.
- 7. (Currently Amended) The <u>isolated</u> type II restriction endonuclease according to claim 6, wherein the microorganism [[are]] <u>is Helicobacter pylori</u>.

- 8. (Original) An isolated nucleic acid encoding a type II restriction endonuclease according to claim 1.
- 9. (Currently Amended) The isolated nucleic acid according to claim 8, wherein the nucleic acid sequence has having the sequence of SEQ ID NO: 2.
- 10. (Original) The isolated nucleic acid according to claim 9, wherein the nucleic acid is originated from *Helicobacter pylori*.
  - 11. (Original) A vector comprising the nucleic acid according to claim 8.
- 12. (Currently Amended) A transformed cell <u>comprising</u> a vector according to claim 11.
- 13. (Currently Amended) [[A]] An isolated recombinant enzyme that specifically recognizes recognizing DNA at a particular nucleotide sequence of nucleotides and which cleaves DNA four and five bases downstream from the particular nucleotide sequence in the top and the bottom strand, respectively, downstream of the particular DNA sequence of nucleotides at the fourth base in the top strand and the fifth base in the bottom strand, and the recombinant enzyme comprising composing the amino acid sequence of SEQ ID NO: 3 SEQ ID NO: 3.